

**REMARKS**

Initially, in the Office Action dated December 27, 2004, the Examiner rejects claims 1, 6, 7, 9-16, 28-30, 34-36 and 39 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,684,800 (Dobbins et al.). Claims 17-22, 31-33, 37, 38 and 40-43 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Dobbins et al. in view of U.S. Patent No. 5,831,975 (Chen et al.). Claims 2-5, 8 and 23-27 have been allowed.

By the present response, Applicants have canceled claims 1, 7 and 37-43 without disclaimer. Further, Applicants have amended claims 6, 9, 10, 12, 13, 17-21, 28-32, and 34-36 to further clarify the invention. Claims 2-6 and 8-36 remain pending in the present application.

**Allowable Subject Matter**

Applicants thank the Examiner for allowing claims 2-5, 8 and 23-27.

**35 U.S.C. §102 Rejections**

Claims 1, 6, 7, 9-16, 28-30, 34-36 and 39 have been rejected under 35 U.S.C. §102(b) as being anticipated by Dobbins et al. Applicants have discussed the deficiencies of Dobbins et al. in Applicants' previously-filed response and reassert all arguments submitted in that response. Applicants respectfully traverse these rejections and provide the following additional remarks.

Claims 1, 7 and 39 have been canceled, therefore, rendering these rejections moot. Regarding claims 6, 9-16, 28-30 and 34-36, Applicants submit that these claims are now dependent on independent claim 2, deemed allowable by the

Examiner and, therefore, are patentable at least for the same reasons noted regarding this allowed independent claim.

Accordingly, Applicants submit that Dobbins et al. does not disclose, suggest or render obvious the limitations in the combination of each of claims 6, 9-16, 28-30 and 34-36 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

35 U.S.C. §103 Rejections

Claims 17-22, 31-33, 37, 38 and 40-43 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Dobbins et al. in view of Chen et al. Applicants have canceled claims 37, 38 and 40-43, therefore, rendering these rejections moot. Applicants respectfully traverse these rejections as to the remaining pending claims.

Chen et al. discloses hierarchical multicast routing in ATM networks that extends the PNNI protocols to support hierarchical multicast routing and signaling for ATM networks. An extension to a core-based tree algorithm is utilized. Instead of a single core node, core nodes are maintained in each peer-group and at each level of the hierarchy. Thus, the one single core node is not overloaded, and fault-tolerance is increased because there are no single points of failure. The scheme supports multiple senders and dynamic membership changes to the multicast group.

Regarding claim 17, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of this claim of, inter alia, multicast relay means operated in such a manner that when data is relayed from networks which are

physically identical to each other, but are logically different from each other to a same destination with reference to the multicast relay destination registering table, such data having a same content being relayed only one time to the same destination with respect to a relay destination, or where if the reception information and transmission information have already been registered, the relay means does not execute relay processing. The Examiner admits that Dobbins et al. does not disclose or suggest data having a same content being relayed only one time to the same destination with respect to a relay destination, but asserts that Chen et al. discloses these limitations at col. 2, lines 31-46. However, these portions of Chen et al. merely disclose that several approaches for multicasting have been proposed and that the simplest approach is termed flooding or truncating broadcast where packets are flooded to all routers in the network and the routers have the responsibility of multicasting the packets within their local subnets. Duplicate packets are discarded by each router. This portion of Chen et al. also discloses that the main disadvantage with flooding is that several redundant packets are transmitted on the links. In contrast, the limitations in the claims of the present application disclose that data is relayed from networks to a same destination with reference to the multicast relay destination registering table and that such data having a same content are relayed only one time to the same destination. The claims of the present application further recite that if the reception information and the transmission information have already been registered, the relay means does not execute relay processing. Therefore, Chen et al. fails to disclose or suggest data

having a same content being relayed only one time to the same destination with respect to a relay destination. In contrast, Chen et al. teaches away from these limitations in the claims of the present application in that Chen et al. discloses that several redundant packages are transmitted on the links.

Regarding claims 18-22 and 31-33, Applicants submit that these claims are dependent on independent claim 17 and, therefore, are patentable at least for the same reasons noted regarding this independent claim. For example, Applicants submit that none of the cited references disclose or suggest the relay means receives only one time, one of multicast packet having a same content and directed to a same destination from information networks which are physically identical to each other, but are logically different from each other after a first multicast packet has been received from the information networks, and thereafter, a preselected time duration has passed, or the relay means transmitting one time, one of multicast packets having a same content to a relay destination which constitutes such networks physically identical to each other but logically different from each other in a case that multicast packets having the same content and directed to the same destination are transmitted after a first multicast packet has been received from the information networks, and thereafter, a preselected time duration has passed.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of claims 17-21 and 31-33 of the present application.


Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

In view of the foregoing amendments and remarks, Applicants submit that claims 2-6 and 8-36 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly, Stanger, Malur & Brundidge, P.C., Deposit Account No. 50-1417 (referencing attorney docket no. 500.39049X00).

Respectfully submitted,

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